



**Revised February 13, 2019**

TO: Stewardship Plan Authors

FROM: Les Hunter, Stewardship Program Coordinator  
Christian Vose, Geospatial Services Branch Head  
Ron Myers, Forest Management Branch Head

SUBJECT: Forest Stewardship Spatial Standards

The US Forest Service Stewardship program requires the annual submission of GIS shapefiles on all Stewardship tract boundaries. The data submitted by NCFS will be utilized to perform spatial analysis where Stewardship efforts are being carried out.

### **Standards for Polygon Creation**

GIS polygons for Stewardship tracts may be digitized by hand (at 1:2400 or better map scale) over orthorectified imagery and stored in a standard GIS shapefile. GPS units that have been approved by the agency for measurement purposes may also be used to create GIS polygons. Only one outer boundary per tract needs to be submitted. Individual stands are not required to be submitted and will not be accepted.

### **Format of Shapefiles**

The projection for Stewardship GIS data is:

- Datum = North American Datum of 1983 (NAD 83)
- Projection = NC State Plane
- Unit of Measure = Meters or Feet

This format is the standard for most NC government agencies. We realize, however, that many private contractors may be using data that is in a different format (ex. units of measure is in "feet"; the datum is in NAD 83 or even NAD 27). Because of this, NCFS will accept shapefiles from a contractor that are not in the preferred format as long as the projection information is included.

If a contractor has a question about formats they will contact the appropriate NCFS service forester for assistance.

A shapefile (extension .shp) has several associated supporting files that are automatically created when the shapefile is created. These supporting files are required for the shapefile to function properly.

At minimum, the following files are **required** for *each* shapefile submission:

- filename.shp – This contains the feature geometry
- filename.dbf – This contains the attribute table
- filename.shx – This contains the spatial index joining the geometry & table
- filename.prj – This contains the projection information

The easiest way to ensure you submit all files is to utilize ArcCatalog to copy and paste.

If you need help submitting your shapefiles so they function properly, please contact the Geospatial Services Branch Head.

### **Attribute table for each Stewardship Shapefile**

Each Stewardship shapefile will use the template attribute table provided by the Geospatial Services Branch Head containing the following fields:

PlanName	PlanCat	PlanID	PlanType
Smokey Bear	Forest Stewardship Plan	001-001	New or Revised

PlanStart	PlanLength**	SurveyAcre	Funding	PrimGoals
12/13/18	10	125	N/A	To show how attributes of a Stewardship shapefile will be entered

**\*\* By default, PlanLength = 10 – This designates 10 years for the plan to be completed\*\***

**Detailed specifications for each field are included as an appendix at the end of this document.**

The Geospatial Services Branch Head has created a template shapefile with the above standardized attribute table. All Stewardship GIS data must use this attribute table so data can be compiled and queried at the national, state, and regional level. The template shapefile is already projected in NC State Plane NAD83 Meters.

You can find the template shapefile (NCFS\_Stewardship\_Template.zip) and base data here:

**S:\Everyone\Stewardship\_Shapefiles\Stewardship\_Reporting.** To use the base data, copy the *whole folder* to a working directory on your C: or D: drive. If you have your own map document with base data, you only need to download the template shapefile.

Instructions for digitizing a polygon for a Stewardship tract using ArcMap can be found on the Geospatial Information and Technology page on the intranet.

## **Stewardship Contractor Delivery of Shapefile**

- Each Stewardship contractor will need to provide the Stewardship plan and shapefile (**with fully attributed table**) to the appropriate service forester/staff member who oversees the county the Stewardship plan was written in.
- The shapefile name will clearly outline the County, Landowner, and 4220 Landowner identifier and/or FMRTS request #.

CountyName\_LandownerLastName\_Landowner4220ProgramIdentifier\_FMRTSrequest#.shp

**Example:** Wake\_Smith\_100\_01\_12452.shp

## **NCFS District Staff Storage/Location of Stewardship Shapefiles**

- Each District will be responsible for compiling Stewardship shapefiles for all Stewardship plans written by NCFS and worked on with a Stewardship contractor.
- District staff will maintain a shapefile containing every Stewardship plan that is written. These shapefiles will be stored on the district server.

- Stewardship plans can be maintained in a master shapefile per fiscal year

- Master shapefiles will be named:

County\_FiscalYear.shp or District\_FiscalYear.shp (once compiled)

**Example:** Wake\_FY19.shp or D11\_FY19.shp (once compiled)

**or**

- Individual shapefiles can be made for each Stewardship plan

- Individual shapefiles will be named:

County\_LandownerLastName\_FiscalYear.shp

**Example:** Haywood\_Johnson\_FY19.shp

- District staff will also store contractor provided shapefiles on the district server.
- At the end of each fiscal quarter, the Assistant District Forester or the District GIS representative will submit all Stewardship plan shapefiles (master file or individual) for that quarter to the appropriate fiscal year folder located here:

S:\Everyone\Stewardship\_Shapefiles

If your district uses a master shapefile, replace the previously submitted shapefile once the new records have been added.

If your district submits individual shapefiles, simply upload your new shapefiles.

**\* Review the Stewardship Technical Manual for a step by step process \***

### **Timing/Frequency of Stewardship shapefile collection**

- Stewardship polygons must be created and stored by the service forester responsible for the plan at the time the Stewardship plan is sent to the landowner.
- At the end of each fiscal quarter (within 15 working days), the Assistant District Forester or the District GIS Representative will collect Stewardship plan shapefiles (including contractor plans) and upload the shapefile(s) to S:\Everyone\Stewardship\_Shapefiles.
- Once shapefiles are uploaded, the Assistant District Forester or the District GIS Representative will email the NCFS Stewardship Program Coordinator and the NCFS GIS Program Manager to report:
  - That the upload has been completed
  - The number of Stewardship Plans uploaded

### **Example:**

“The shapefiles for District 9 Stewardship Plans have been uploaded to the server. We had 8 plans in FY19 Q1.”

<b>State Fiscal Year</b>	
Quarter 1	July 1 <sup>st</sup> – September 30 <sup>th</sup>
Quarter 2	October 1 <sup>st</sup> – December 31 <sup>st</sup>
Quarter 3	January 1 <sup>st</sup> – March 31 <sup>st</sup>
Quarter 4	April 1 <sup>st</sup> – June 30 <sup>th</sup>

## Appendix – Detailed Specifications for Shapefile Attribute Table

PlanName	PlanCat	PlanID	PlanType
Smokey Bear	Forest Stewardship	001-001	New or Revised

  

PlanStart	PlanLength	SurveyAcre	Funding	PrimGoals
12/13/18	10	125	N/A	To show how attributes of a Stewardship shapefile will be entered

**When filling out the attribute table, please use the values/formatting specified for each field and no others.**

1. **PlanName** – This is the landowner **First** and **Last** Name.

**Example:** Smokey Bear

2. **PlanCat** – This is Forest Stewardship or Forest Stewardship Other (if created by a contractor)

**Example:** Forest Stewardship

3. **PlanID** – This will be the unique Landowner ID number generated by the County Ranger for the DFR internal 4220 Accomplishment Reporting System. This number will come from the County Ranger and can be entered into the attribute table by a private contractor or DFR representative.

**Example:** 001-150 or 001-150B

4. **PlanType** – This is either **New** or **Revised**.

**Example:** New

5. **PlanStart** – This is the date the plan was started.

**Example:** 12/14/18

6. **PlanLength** – This field is the time allowed for completion. It is **10**, by default.

**Example:** 10

7. **SurveyAcre** – The number of acres the plan was written for.

**Example:** 64

8. **Funding** – If known, this is the acronym for the payment type. The default value is **N/A**

**Example:** CREP or N/A

9. **PrimGoals** – Enter any goals, comments, or additional plan information (limit 254 characters).